

AMENDMENTS TO THE CLAIMS:

1. (canceled)

2. (withdrawn) A two-way CATV system comprising:

at least one bidirectional amplifier provided on a CATV transmission path for connecting a CATV center station to a subscriber home;

bias voltage superposing means for superposing, with a bias voltage, a downstream signal transmitted along a coaxial transmission path subordinate to an amplifier at the terminal among said bidirectional amplifiers; and

bias current adjusting load means, provided at each of tap-offs of said coaxial transmission path, for setting the bias current corresponding to an application of the bias voltage superposed by said bias voltage superposing means.

3. (currently amended) A two-way CATV system comprising:

at least one bidirectional amplifier provided on a CATV transmission path for connecting a CATV center station to a subscriber home;

bias voltage superposing means for superposing, with ~~[[a]]~~ an AC frequency bias voltage within a bidirectional amplifier at the terminal of said at least one bidirectional amplifier, a downstream RF frequency signal transmitted along a coaxial transmission path subordinate to the bidirectional amplifier at the terminal; and

bias current adjusting load means, provided at the end of said coaxial transmission path, for setting an AC frequency ~~the~~ bias current corresponding to an application of the AC frequency bias voltage superposed by said bias voltage superposing means and for flowing a uniform AC frequency current on said coaxial transmission path; and

wherein said bias current adjusting load means includes an inductive element in series with ~~is a resistance element coupled by a~~ ~~in~~ parallel connection to a terminating resistance element, wherein said inductive element is selected so that the resistance of the coupled current adjusting load means and terminating resistance element approximates the resistance of the terminating resistance element for RF signals.

4. **(currently amended)** A two-way CATV system comprising:

at least one bidirectional amplifier provided on a CATV transmission path for connecting a CATV center station to a subscriber home;

bias voltage superposing means for superposing, with ~~[[a]]~~ an AC frequency bias voltage within a bidirectional amplifier at the terminal of said at least one bidirectional amplifier, a downstream RF frequency signal transmitted along a coaxial transmission path subordinate to the bidirectional amplifier at the terminal; and

bias current adjusting load means, provided at the end of said coaxial transmission path, for setting an AC frequency the bias current corresponding to an application of the AC frequency bias voltage superposed by said bias voltage superposing means and for flowing a uniform AC frequency current on said coaxial transmission path; and

wherein said bias current adjusting load means includes an inductive element in series with an impedance circuit coupled by a ~~is constructed of an impedance element including at least one of an inductor element and a capacitor element in parallel connection to a terminating resistance element, wherein said impedance circuit includes a capacitive element coupled by a parallel connection to a second inductive element or a second capacitive element, and wherein said inductive element is selected so that the resistance of the coupled current adjusting load~~

means and terminating resistance element approximates the resistance of the terminating resistance element for RF signals.

5. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein the bias voltage with which said bias voltage superposing means superposes the downstream signal, is an AC bias voltage.

6. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes means for generating a DC bias voltage as the bias voltage with which the downstream signal is superposed.

7. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes means for generating a pulsating bias voltage as the bias voltage with which the downstream signal is superposed.

8. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes:

means for generating positive and negative DC bias voltages as the bias voltages with which the downstream signal is superposed; and

means for alternately periodically superposing the positive and negative DC bias voltages in response to control signals given from said CATV center station.

9. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes:

means for generating positive and negative pulsating bias voltages as the bias voltages with which the downstream signal is superposed; and

means for alternately periodically superposing the positive and negative pulsating bias voltages in response to control signals given from said CATV center station.

10. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes:

means for generating positive and negative DC bias voltages as the bias voltages with which the downstream signal is superposed; and

means for alternately superposing the positive and negative DC bias voltages in response to time-period signals.

11. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes:

means for generating positive and negative pulsating bias voltages as the bias voltages with which the downstream signal is superposed; and

means for alternately superposing the positive and negative pulsating bias voltages in response to time-period signals.

12. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein the bias voltage with which said bias voltage superposing means superposes the downstream signal is an AC bias voltage, and

said two-way CATV system further comprises means for supplying said coaxial transmission path with the AC bias voltage in response to the control signal given from said CATV center station.

13. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes:

a transformer for boosting the AC bias voltage with which the downstream signal is superposed;

switch means for applying a large voltage in burst on a time-period basis for a short time; and

filter means for filtering only the burst bias current.

14. (withdrawn) A two-way CATV system according to claim 1 or 2, wherein said bias voltage superposing means includes:

means for boosting and rectifying the AC bias voltage with which the downstream signal is superposed;

a capacitor element for accumulating DC high voltage outputs;

switch means for discharging the DC high voltage in pulse on a time-period basis for a short time; and

filter means for filtering only the pulse bias current.

15. (new) A two-way CATV system according to claim 3, wherein said AC frequency bias current is set at a level to overcome a diode effect of a coaxial connector in the coaxial transmission path.

16. (new) A two-way CATV system according to claim 3, wherein said AC frequency bias current is set at a level to match a maximum branch output current level of the bidirectional amplifier.